

Claims

1. A handheld device (10), having a position sensing means (14) on a rear side (12) of said device (10) for reading position coordinate data (x, y, z) while manually moving said device (10) rear side (12) on a working surface (22), a display screen (20) on a front side (21) of said device (10), said position sensing means (14) controlling a cursor (24) on said display (20), by further comprising:

a device-to-cursor position coordinate data (x, y, z) conversion means provided to process the device coordinate data (x, y, z) in accordance to a preset ratio for scaled cursor (24) coordinate data (x, y, z), thus defining a cursor (24) movement which is in scaled correspondence with the device movement; and

a cursor (24) controller means for a cursor (24) movement across said display according to the scaled cursor (24) coordinate data (x, y, z);

whereby the cursor (24) moves on the digital display concurrently as the device is manually moved across the surface in scaled correspondence with the movement pattern of the device.

2. A device according to claim 1, wherein said cursor (24) is cancelled on the display thus providing movement in Arcadian display environments.

3. A device according to claim 1, wherein the device coordinate data (x, y, z) is constituted of relative surface position readings in the X and Y direction axes according to a suitable coordinate system.

4. A device according to claim 1, wherein said sensing means is a trackball.

5. A device according to claim 1, wherein the sensing means comprises a light source radiating light on said surface.

6. A device according to claim 5, wherein said radiated light reflected from said surface is received by a charge coupled device for determining coordinate data (x, y, z).

7. A device according to claim 6, wherein the device is provided a digital camera, said camera in one mode functioning as said sensing means.

8. A device according to claim 1, wherein the device is provided a digital camera, said camera in one mode functioning as said sensing means.

9. A device according to claim 1, wherein a decision means when lifting/putting said device down is triggered to a decision regarding an object depicted by the cursor (24).

10. A device according to claim 7, wherein a coordinate system provides coordinates in three dimensions through a third axis Z, which coordinates are determined by said camera having distance determining means.

11. A method for a handheld device (10), having a position sensing means (14) on a rear side (12) of said device (10) for reading position coordinate data (x, y, z) (x, y, z) while manually moving said device (10) rear side (12) on a working surface (22), a display screen (20) on a front side (21) of said device (10), said position sensing means (14) controlling a cursor (24) on said display (20), comprising the steps of:

providing processing of device coordinate data (x, y, z) according to a preset ratio for scaled cursor (24) coordinate data (x, y, z), thus defining a cursor (24) movement which is in scaled correspondence with the device movement; and

controlling the cursor (24) during a cursor (24) movement across said display according to the scaled cursor (24) coordinate data (x, y, z);

whereby the cursor (24) moves on the digital display concurrently as the device is manually moved across the surface in scaled correspondence with the movement pattern of the device.

12. A method for a device according to claim 11, wherein said cursor is cancelled on the display thus providing movement in Arcadian display environments.

13. A method for a device according to claim 11, wherein the device coordinate data is constituted of relative surface position readings in the X and Y direction axes according to a suitable coordinate system.

14. A method for a device according to claim 11, wherein said sensing is provided by a trackball.

15. A method for a device according to claim 11, wherein the sensing comprises a light source radiating light on said surface.

16. A method for a device according to claim 15, wherein said radiated light reflected from said surface is received by a charge coupled device for determining coordinate data.

17. A method for a device according to claim 16, wherein the device is provided a digital camera, said camera in one mode functioning as said sensing means.

18. A method for a device according to claim 11, wherein the device is provided a digital camera, said camera in one mode functioning as said sensing means.

19. A method for a device according to claim 11, wherein a decision means when lifting/putting said device down is triggered to a decision regarding an object depicted by the cursor.

20. A method for a device according to claim 17, wherein a coordinate system provides coordinates in three dimensions through a third axis Z, which coordinates are determined by said camera having distance determining means.